

**Montana Board of Oil and Gas Conservation  
Environmental Assessment**

**Operator:** Primary Petroleum Corporation  
**Well Name/Number:** Ralston Gap 4-13-25-6  
**Location:** NW NW Section 13 T25N R6W  
**County:** Teton, **MT;** **Field (or Wildcat)** Wildcat

**Air Quality**

(possible concerns)

Long drilling time: No, 10 to 14 days drilling time.

Unusually deep drilling (high horsepower rig): No, triple derrick drilling rig to drill to 5,000' TD Duperow Formation.

Possible H<sub>2</sub>S gas production: Yes possible H<sub>2</sub>S gas production.

In/near Class I air quality area: No Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under rule 75-2-211.

Mitigation:

☒ Air quality permit (AQB review)

☐ Gas plants/pipelines available for sour gas

☐ Special equipment/procedures requirements

☐ Other: \_\_\_\_\_

Comments: No special concerns – using triple derrick drilling rig to drill to 5000'

TD.

**Water Quality**

(possible concerns)

Salt/oil based mud: No, freshwater and freshwater mud system. Surface to total depth will be drilled with freshwater/mud system.

High water table: No high water table anticipated.

Surface drainage leads to live water: No, closest drainages are an unnamed ephemeral tributary drainage to the Foster Creek, about 1/2 of a mile to the northwest and an unnamed ephemeral tributary drainage to the Teton River, about 1 mile to the south from this location.

Water well contamination: None, closest water wells are about 3/4 of a mile to the southwest and 3/4 of a mile to the northeast from this location. All other water wells are 1 mile and further away. The wells are 46' and 75' in depth. This well will drill surface hole with freshwater, set 750' of steel surface casing and cement to surface.

Porous/permeable soils: No, sandy silty bentonitic soils.

Class I stream drainage: None

Mitigation:

☐ Lined reserve pit

☒ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☒ Closed mud system

☐ Off-site disposal of solids/liquids (in approved facility)

☐ Other: \_\_\_\_\_

Comments: 750' of surface casing cemented to surface adequate to protect freshwater zones. Freshwater mud to be used to drill from surface to total depth.

## Soils/Vegetation/Land Use

(possible concerns)

Stream crossings: None anticipated.

High erosion potential: No, small cut, up to 8.2' and small fill, up to 0.2', required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, 350'X350' location size required.

Damage to improvements: Slight, appears to be CRP land.

Conflict with existing land use/values Slight

Mitigation

☐ Avoid improvements (topographic tolerance)

☐ Exception location requested

☒ Stockpile topsoil

☐ Stream Crossing Permit (other agency review)

☒ Reclaim unused part of wellsite if productive

☐ Special construction methods to enhance reclamation

☐ Other \_\_\_\_\_

Comments: Access will be over existing state highway #89 and over private farm/ranch roads. Cuttings will be stockpiled on location. Drilling fluids will be recycled to the next drilling location. No pit will be utilized. No special concerns.

## Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: Nearest residences are about ¾ of a mile to the north, about 1 mile to the southwest, 1.125 miles to the northeast and about 1.5 miles to the east is the Miller Hutterite Colony from this location.

Possibility of H2S: Yes H2S possible.

Size of rig/length of drilling time: Triple derrick/Double drilling rig/short 10 to 14 days drilling time.

Mitigation:

☒ Proper BOP equipment

☐ Topographic sound barriers

☐ H2S contingency and/or evacuation plan

☐ Special equipment/procedures requirements

☐ Other: \_\_\_\_\_

Comments: No concerns. Distance is sufficient to not be a problem with noise.

## Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): About 15 miles to the west northwest is the Blackleaf State Wildlife Management Area. About 17 miles to the west is the Lewis & Clark National Forest boundary.

Proximity to recreation sites: About 5 miles to the northwest is Bynum Reservoir, About 15 miles to the west northwest is the Blackleaf State Wildlife Management Area. About 17 miles to the west is the Lewis & Clark National Forest boundary.

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: Threatened or endangered Species listed on USFWS website for counties in Montana lists the following: Grizzly Bear and Canada

Lynx. Candidate species listed are the Sprague's Pipit, Wolverine and the White bark pine. NH Tracker website lists the following as species of concern five (5) Ferruginous Hawk, Black Tern, Bald Eagle, Horned Grebe and McCown's Longspur.

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)
- ☒ Other agency review (DFWP, federal agencies, DSL)
- ☐ Screening/fencing of pits, drillsite
- ☐ Other: \_\_\_\_\_

Comments: State of Montana Trust Land, CRP surface lands. Trust Lands will do surface EA.

### **Historical/Cultural/Paleontological**

(possible concerns)

Proximity to known sites None identified

Mitigation

- ☐ avoidance (topographic tolerance, location exception)
- ☒ other agency review (SHPO, DSL, federal agencies)
- ☐ Other: \_\_\_\_\_

Comments: State of Montana Trust Land, CRP surface lands. Trust Lands will do surface EA.

### **Social/Economic**

(possible concerns)

- ☐ Substantial effect on tax base
- ☐ Create demand for new governmental services
- ☐ Population increase or relocation

Comments: Wildcat well, until production is established no social/economic concerns can be evaluated. No concerns

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\_\_\_\_\_  
\_\_\_\_\_

### **Remarks or Special Concerns for this site**

Well is a 5000' TD Duperow Formation test.

### **Summary: Evaluation of Impacts and Cumulative effects**

No long term impacts expected. Some short term impacts will occur, but can be mitigated in a short time.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/Steven Sasaki \_\_\_\_\_

(title:) Chief Field Inspector \_\_\_\_\_

Date: November 28, 2011 \_\_\_\_\_

Other Persons Contacted:

Montana Bureau of Mines and Geology, GWIC website  
(Name and Agency)  
Teton County water wells.  
(subject discussed)  
October 1, 2011  
(date)

US Fish and Wildlife, Region 6 website  
(Name and Agency)  
ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES  
MONTANA COUNTIES, Teton County  
(subject discussed)

October 1, 2011  
(date)

Montana Natural Heritage Program Website (FWP)  
(Name and Agency)  
Heritage State Rank= S1, S2, S3, T25N R6W  
(subject discussed)

October 1, 2011  
(date)

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_